

# Shaodong Wang

---

CONTACT INFORMATION	Nanjing University of Science and Technology School of Mathematics and Statistics 210094, Nanjing, China	18715161052 shaodong.wang@mail.mcgill.ca
EMPLOYMENT	<b>Nanjing University of Science and Technology</b> Associate Professor	2023.06-present
	<b>Shanghai Jiao Tong University</b> Wu Wen-Tsun Assistant Professor	2019.06-2023.05
EDUCATION	<b>McGill University</b> Ph.D. in Mathematics	2014.09-2019.05
	<ul style="list-style-type: none"><li>• Dissertation Topic: Compactness and noncompactness of Yamabe-type problems on manifolds with boundary</li><li>• Advisors: Pengfei Guan and Jérôme Vétois</li></ul>	
	<b>University of Science and Technology of China</b> B.S. in Mathematics	2010.09-2014.06
RESEARCH INTERESTS	<ul style="list-style-type: none"><li>• Non-linear partial differential equations</li><li>• Geometric Analysis</li></ul>	
PUBLICATIONS AND PREPRINTS	<p>S. Almaraz and S. Wang, <i>A positive mass theorem for non-smooth metrics on asymptotically flat manifolds with non-compact boundary</i>. Preprint on arXiv:2506.20453.</p> <p>C. Liu, S. Wang and R. Zhuo, <i>A priori estimates for anti-symmetric solutions to a fractional Laplacian equation in a bounded domain</i>. Nonlinear Anal. 263 (2026), Paper No. 113970, 10 pp.</p> <p>S. Almaraz and S. Wang, <i>A priori estimates for negative constant scalar curvature conformal metrics with positive constant boundary mean curvature</i>. J. Lond. Math. Soc. 111 (2025), no. 3, Paper No. e70109.</p> <p>S. Almaraz and S. Wang, <i>A compactness theorem for conformal metrics with constant scalar curvature and constant boundary mean curvature in dimension three</i>. Calc. Var. Partial Differential Equations 64 (2025), no. 1, Paper No. 35.</p> <p>S. Almaraz and S. Wang, <i>Energy bounds of sign-changing solutions to Yamabe equations on manifolds with boundary</i>. Nonlinear Anal. 225 (2022), Paper No. 113131.</p> <p>C. Liu and S. Wang, <i>A necessary condition for prescribing mean curvature equations in <math>\mathbb{B}^n</math></i>. Proc. Amer. Math. Soc. 150 (2022), no. 11, 4831–4839.</p> <p>S. Almaraz, O. Queiroz and S. Wang, <i>A compactness theorem for scalar-flat metrics on 3-manifolds with boundary</i>. J. Funct. Anal. 277 (2019), no. 7, 2092–2116.</p> <p>J. Vétois and S. Wang, <i>Infinitely many solutions for cubic nonlinear Schrödinger equations in dimension four</i>. Adv. Nonlinear Anal. 8 (2019), no. 1, 715–724.</p>	

S. Wang, *Infinitely many blowing-up solutions for Yamabe-type problems on manifolds with boundary*. Commun. Pure Appl. Anal. 17 (2018), no. 1, 209–230.

## ACADEMIC ACTIVITIES

### Invited Talks

- *Geometric Analysis Seminar*, Tongji University July 2025
- *Geometric Analysis Workshop*, Nanjing University May 2025
- *Workshop on Nonlinear PDEs XX*, Shanghai Jiao Tong University January 2024
- *CUHK/CUNY Compactness and Scalar Curvature Workshop*, CUHK/CUNY (Online) July 2023
- *International Conference on PDEs and Geometric Analysis*, Shanghai Jiao Tong University (Online) June 2022
- *PDE Seminar*, Chinese Academy of Sciences (Online) May 2022
- *Mathematics Seminar*, Wuhan University of Technology (Online) November 2021
- *International Conference on Geometric Analysis and PDEs*, Shanghai Jiao Tong University July 2021
- *Workshop on Nonlinear PDEs XI*, Shanghai Jiao Tong University March 2021
- *Nonlinear Evolutionary PDEs: Theories and Applications*, Shanghai Jiao Tong University (Online) December 2020
- *Workshop on Geometric Analysis*, Tongji University October 2019
- *Conference on Elliptic PDEs*, Fudan University November 2019
- *Geometric Analysis Seminar*, Nanjing University June 2019
- *Workshop on Nonlinear PDEs VII*, Shanghai Jiao Tong University June 2019
- *Differential Geometry Seminar*, University of Federal Fluminense October 2017
- *PDE Seminar*, University of Science and Technology of China June 2017
- *Geometric Analysis Seminar*, McGill University April 2017

### Refereeing Activities for Journals

- Science China Mathematics
- Communications on Pure and Applied Analysis
- Journal of Differential Equations
- Nonlinear Differential Equations and Applications NoDEA

## RESEARCH GRANTS

- National Foreign Expert Project No. H20240846 2024-2025
- National Natural Science Foundation of China (NSFC) No.12001364 2021-2023

## TEACHING

### At Nanjing University of Science and Technology

- Mathematical Analysis I Fall 2025
- Mathematical Analysis I Fall 2024

### At Shanghai Jiao Tong University

- MA247 Basic Calculus Fall 2020
- MA247 Basic Calculus Fall 2019